Comments on 9/2005 Draft of California Energy Commission 2005 Integrated Energy Policy Report, Chapter 2

9/29/2005 Committee Hearings

Imperial Valley Biorefining, Inc.

Summary of Impressions

- Overall excellent analysis and recommendations
- Would benefit from inclusion of job creation, economic growth, trade balance impacts
- Recommendation timeline penalizes local projects, reduces ability of California to benefit from some valuable Energy Policy Act provisions
- Imperial Valley Biorefining project used to Illustrate omitted benefits, timing penalties
- Proposal(s) State/private sector collaboration to achieve goals



Imperial Valley Biorefining Project Overview

- Start up 20 million gallon per year facility on molasses within 1 year after permitting completed
- Add whole sugarcane feedstock after startup, expand to 60 MMGPY
- Add one 100 MMGPY facility each year with goal of 500 MMGPY capacity by 2012
- IVB Goal: Robust network of biorefineries with capacity to produce 1+ billion gallons per year of fuel ethanol for gasoline blending, and E85 to fuel growing fleet of E85 Flexible Fuel Vehicles (FFVs)

Alignment of IVB Project with Committee Recommendations

- Significant displacement of petroleum, increased fuel diversity and security
- Stabilizing impact on gasoline prices
- Positive impact on greenhouse gas emissions
- Delivery system takes advantage of open rail capacity from Gulf Coast to California
- Coordinated Federal, State, Local multifaceted approach
- Community and grower support No NIMBY attitude
- Healthy State ethanol industry can support significant R&D, market development activities, fund capacity expansions, aid State in long term fuels strategy development

Report Table 1 (page 11) Issues

| <u>Benefits</u> | <u>E10</u> | <u>E85</u> |
|--|------------|------------|
| Report Values | | |
| 2025 Gasoline Displacement, B GPY | 0.48 | 1.61 |
| Direct Environmental Benefit, B 2005\$ | 1.98 | 0.20 |
| Direct Non-Environmental Benefit, B 2005\$ | 0.00 | 0.00 |

Comments

2025 Gasoline Displacement, B GPY -- Total of 3-5 B GPY possible Direct Environmental Benefit, B 2005\$ -- Why is E85 less than E10? Direct Non-Environmental Benefit, B 2005 -- Value expected to be large; quantification depends on accounting, element valuation.

Socioeconomic Benefits*

| | Output. | MM GPY |
|--|-----------|--------------|
| Benefits | <u>60</u> | <u>1,000</u> |
| Permanent Jobs | 1,200 | 20,000 |
| Invested Capital, \$MM | 146 | 2,400 |
| Construction Spending, \$MM** | 351 | 5,900 |
| Increase in Local Economy Base, \$MM | 152 | 2,500 |
| Incr. in Annual Household Income, \$MM | 303 | 5,100 |
| Red. In Ann. Gasoline Imports, MM Gal. | 79 | 1,300 |
| Balance of Trade @ \$1.50/Gal., \$MM | 119 | 2,000 |
| Tax Revenue | ? | ?? |

^{*} Estimates from studies in other states (Kapell and Urbanchuck)

^{**} One time spending over years of construction

Energy Policy Act (EPA) Timing Issues

- EPA provides way for State to leverage its efforts to reduce fossil fuel use
- Sunset legislation (2012) limits window of opportunity for private sector participation, and leveraging of State Efforts*
- Gulf Coast damage will limit availability of most funds for reducing fossil fuel use
 - Most funds requiring appropriation stillborn
 - Most funds not requiring appropriation survive

^{*} EPA Title XV Subtitle A, Sect. 1501 (a)(2) [HR6-page 477, Thomas]

Proposed Solution to Timing Issues

- Test deployment of Flexible Fuel Vehicle (FFV) Fleet in parallel with Recommended Program, monitored by stakeholder group to learn directly, and prevent to abuses
- Increase population of FFV in Southern California running on E85
 - Executive Order for all government vehicles
 - Federal government increase FFV use on military bases
- Install dispensing pumps under temporary permit
 - Military bases
 - Civilian locations
- Fast-track zoning/permitting of cellulose-to ethanol facilities (no reduction in standards)

